

Water-Data Report 2013

14165500 MCKENZIE RIVER NEAR COBURG, OR

Willamette Basin
Mckenzie Subbasin

LOCATION.--Lat 44°06'47.0", long 123°02'49.1" referenced to North American Datum of 1983, Lane County, OR, Hydrologic Unit 17090004, on right bank, at upstream side of Armitage Bridge, 2 mi southeast of Coburg and at mile 7.2.

DRAINAGE AREA.--1,337 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1944 to September 1972, November 2010 to September 2011 (gage heights only), October 2011 to current year.

REVISED RECORDS.--WSP 1638: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 386.08 ft above NAVD of 1988 (levels by U.S. Army Corps of Engineers). Prior to Nov. 24, 1944, nonrecording gage and Nov. 25, 1944 to Sept. 30, 1972, at site 30 ft downstream at different datums.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated since 1963 by Smith River Reservoir (station 14158795) and Cougar Lake (active capacity, 164,800 acre-ft), and since 1968 by Blue River Lake (active capacity, 85,550 acre-ft). Slight diurnal fluctuation caused by logponds and powerplants upstream. Water supply for city of Eugene is diverted upstream; small diversions for irrigation upstream from station. Continuous water-quality records for periods October 1963 to September 1974 and April 1983 to September 1984 have been collected at this location.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--30 years (water years 1945-1972, 2012-13), 5,905 ft³/s, 4,278,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88,200 ft³/s Dec. 29, 1945, gage height, 21.36 ft, site and datum then in use, from rating curve extended above 59,000 ft³/s; minimum discharge, 1,080 ft³/s Aug. 19, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood stage of 22.2 ft was reached in December 1861, 21.8 ft in February 1890, and 20.1 ft in January 1943 (information from U.S. Army Corps of Engineers), all at different datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 35,400 ft³/s Dec. 5, gage height, 16.83 ft; minimum discharge, 1,970 ft³/s Aug. 18.

14165500 MCKENZIE RIVER NEAR COBURG, OR—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,900	6,430	11,300	6,330	7,690	5,830	4,630	4,200	4,270	2,810	2,260	2,500
2	2,900	6,430	16,800	5,990	7,300	5,680	4,970	4,450	3,980	2,780	2,270	2,460
3	2,880	6,140	15,000	5,710	6,750	5,330	4,900	4,610	3,790	2,630	2,270	2,490
4	2,880	5,880	13,500	5,180	6,340	5,140	4,790	4,580	3,680	2,690	2,210	2,450
5	2,840	5,490	27,900	5,020	5,960	4,990	6,000	4,560	3,590	2,640	2,240	2,570
6	2,910	5,460	21,300	4,930	5,960	5,070	7,030	4,600	3,460	2,610	2,190	3,020
7	2,890	5,460	15,600	5,180	5,840	5,130	8,760	4,490	3,370	2,620	2,210	2,750
8	2,890	5,350	13,700	6,490	5,590	4,850	9,600	4,280	3,230	2,580	2,210	2,590
9	2,910	5,420	12,500	7,360	5,300	4,620	8,590	4,180	3,240	2,550	2,230	2,550
10	2,960	5,460	11,700	7,480	4,970	4,240	7,770	4,170	3,170	2,490	2,270	2,530
11	2,990	5,360	11,300	6,930	4,870	4,110	6,940	4,290	3,270	2,500	2,220	2,530
12	3,010	5,490	11,400	6,240	4,640	4,140	6,210	4,300	3,440	2,500	2,220	2,530
13	3,260	6,330	10,900	5,610	4,470	4,150	5,720	4,240	3,460	2,410	2,210	2,550
14	3,130	6,020	10,600	5,270	4,250	4,300	5,500	4,080	3,480	2,450	2,180	2,540
15	3,390	5,720	10,000	5,090	4,290	4,270	5,210	3,960	3,450	2,420	2,210	2,520
16	5,350	5,840	9,570	4,900	4,350	4,330	5,580	3,930	3,420	2,440	2,190	2,530
17	4,180	5,880	12,000	4,710	4,210	4,580	5,560	4,180	3,280	2,380	2,160	2,560
18	3,690	6,060	12,000	4,670	4,110	4,350	5,230	4,040	3,320	2,370	2,110	2,620
19	3,710	6,050	10,400	4,850	4,130	4,250	5,360	4,060	3,490	2,390	2,090	2,570
20	4,480	15,400	10,600	4,930	4,080	4,940	6,190	4,000	3,540	2,370	2,120	2,550
21	4,550	16,600	11,300	4,910	4,160	6,130	6,050	4,000	3,400	2,340	2,170	2,680
22	4,570	13,400	10,400	4,800	4,210	5,570	5,710	4,450	3,330	2,320	2,170	2,690
23	4,730	11,400	9,930	4,800	5,120	5,220	5,060	4,500	3,370	2,350	2,200	2,870
24	4,630	12,600	9,700	4,950	4,660	4,810	4,830	4,260	3,420	2,330	2,480	2,940
25	5,060	13,400	9,260	5,510	4,660	4,630	4,570	3,950	3,470	2,270	2,580	3,510
26	4,980	11,600	9,690	7,550	4,700	4,500	4,520	3,910	3,610	2,250	2,620	3,130
27	5,000	11,200	9,650	7,320	4,610	4,410	4,490	4,190	3,240	2,300	2,590	3,130
28	6,250	10,500	9,070	7,870	4,590	4,320	4,450	4,960	3,010	2,290	2,530	3,630
29	8,280	10,300	8,260	9,770	---	4,320	4,420	4,790	2,930	2,240	2,570	5,800
30	7,810	10,800	7,410	9,580	---	4,340	4,400	4,970	2,890	2,240	2,550	10,300
31	6,680	---	6,860	8,500	---	4,410	---	4,600	---	2,230	2,540	---
Total	128,690	247,470	369,600	188,430	141,810	146,960	173,040	133,780	102,600	75,790	71,070	92,090
Mean	4,151	8,249	11,920	6,078	5,065	4,741	5,768	4,315	3,420	2,445	2,293	3,070
Max	8,280	16,600	27,900	9,770	7,690	6,130	9,600	4,970	4,270	2,810	2,620	10,300
Min	2,840	5,350	6,860	4,670	4,080	4,110	4,400	3,910	2,890	2,230	2,090	2,450
Ac-ft	255,300	490,900	733,100	373,800	281,300	291,500	343,200	265,400	203,500	150,300	141,000	182,700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3,128	6,144	9,318	9,921	9,171	7,889	7,222	6,502	4,587	2,827	2,302	2,272
Max	6,684	12,180	24,370	18,670	17,200	16,400	10,940	10,130	7,377	3,879	3,484	3,551
(WY)	(1951)	(1951)	(1965)	(1965)	(1961)	(1972)	(2012)	(1949)	(1950)	(2011)	(1971)	(1972)
Min	1,417	1,933	2,061	3,308	4,327	4,303	3,777	3,279	2,750	2,018	1,657	1,605
(WY)	(1945)	(1953)	(1945)	(1963)	(1966)	(1965)	(1970)	(1968)	(1970)	(1968)	(1945)	(1945)

14165500 MCKENZIE RIVER NEAR COBURG, OR—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1945 - 2013	
Annual total	2,714,980		1,871,330			
Annual mean	7,418		5,127		5,905	
Highest annual mean					8,275	1956
Lowest annual mean					4,332	1968
Highest daily mean	34,800	Jan 25	27,900	Dec 5	83,100	Dec 23, 1964
Lowest daily mean	2,460	Sep 2	2,090	Aug 19	1,310	Oct 25, 1944
Annual seven-day minimum	2,720	Sep 1	2,140	Aug 16	1,330	Oct 24, 1944
Annual runoff (ac-ft)	5,385,000		3,712,000		4,278,000	
10 percent exceeds	12,600		9,690		10,900	
50 percent exceeds	6,460		4,450		4,540	
90 percent exceeds	2,880		2,380		2,030	

